Chronic plasma cell balanitis of Zoon Report of two cases

V. N. SEHGAL, V. L. REGE, AND GAURI BAZAZ MALIK From the Departments of Venereology and Dermatology and Pathology, Goa Medical College, Panaji, Goa, India

Genital sores are common in venereal disease clinics and most of them can be diagnosed at the first examination, but there are a few which are likely to be misdiagnosed. Two cases which demonstrate this point are reported below.

Case reports

Case 1, a 32-year-old unmarried man, presented with an erosive eruption over the genitalia which had gradually increased in size for the past 6 months without causing discomfort. He admitted sexual exposure a month before the appearance of the eruption, and had already received injections and capsules, which could not be identified.

Examination

There was a non-tender, well circumscribed, soft, velvety, raised lesion about 1 cm. across on the under surface of the prepuce (Fig. 1). The regional lymph nodes were not enlarged. No other abnormality was found on general examination. A VDRL test was non-reactive.

He was given an injection of 2.4 m.u. benzathine penicillin but with no beneficial effect, and was observed for about 6 weeks before a biopsy was taken.

Case 2, a 20-year-old unmarried man, developed multiple ulcers on the penis about a fortnight after sexual intercourse. The lesions progressed to form a granuloma in the course of 4 months. They were unaffected by a course of intramuscular penicillin.

Examination

A large, moist, granulomatous, velvety lesion was seen on the under surface of the prepuce. It was non-tender but oozed blood when touched. The inguinal lymph nodes were not enlarged. General examination showed nothing abnormal. A VDRL test was nonreactive.

HISTOPATHOLOGICAL FINDINGS

In both cases sections stained with haematoxylin and eosin showed a marked spongiosis of the epider-

Received for publication September 7, 1972 Reprint requests to Prof. V. N. Sehgal, as above

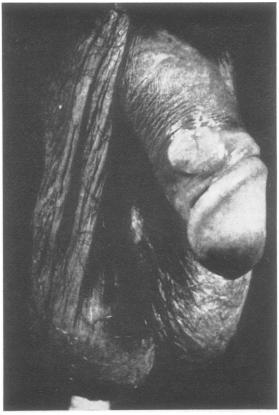
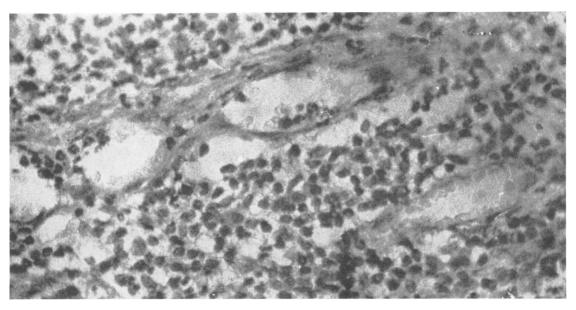
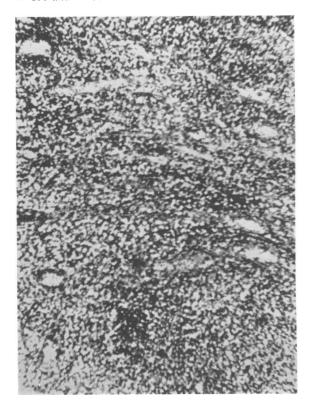


FIG. 1 Circumscribed, soft, velvety, raised lesion on under surface of prepuce

mis, with blunting of the rete ridges in places. The dermis was occupied by a dense infiltrate (Figs 2 and 3) composed largely of plasma cells. A few lymphocytes were seen interspersed in the infiltrate. No endarteritis of the blood vessels was found, but they were dilated and filled with red blood corpuscles.



FIGS 2 AND 3 Dense plasma cell infiltrate in dermis with conspicuous dilated dermal blood vessels. \times 400 and \times 800



Discussion

Most genital sores are easily diagnosed from their appearance and from the results of laboratory tests, and usually respond well to the appropriate treatment. If the lesions persist, however, histopathological examination is required and this usually establishes the diagnosis.

In the two cases under review the lesions persisted for a considerable time even after treatment, and the most likely diagnosis seemed to be either 'erythroplasia of Queyrat' or 'chronic plasma cell balanitis of Zoon' (Zoon, 1952). These conditions are said to be similar but the microscopical pathology is different (Lever, 1967). In our cases the pathology was dominated by the infiltration of plasma cells and dilated blood vessels characteristic of the chronic plasma cell balanitis of Zoon (Lever, 1967; Wilkinson, 1968). It is emphasized that this rare condition should be kept in mind when examining genital sores, otherwise the diagnosis is likely to be overlooked. The aetiology of this condition is unknown and no satisfactory treatment exists. The lesions tend to persist and prolonged follow-up is required to establish whether in some cases they represent a type of carcinoma in situ.

Summary

The clinical and histopathological features of two cases of chronic plasma cell balanitis of Zoon are described. This condition should be considered in the differential diagnosis of persistent penile sores.

References

LEVER, W. F. (1967) 'Histopathology of the Skin', 4th ed., p. 521. Lippincott, Philadelphia

WILKINSON, D. S. (1968) 'Diseases of the Perianal and Genital Regions' in 'Textbook of Dermatology', by A. Rook, D. S. Wilkinson, and F. J. G. Ebling, 1st ed., p. 1537. Blackwell Scientific Publications, Oxford ZOON, J. J. (1952) Dermatologica (Basel), 105, 1

Balanite chronique à plasmocytes de Zoon. Exposé de deux cas

Les caractères cliniques et histopathologiques de deux cas de balanite à plasmocytes chronique de Zoon sont décrites. Cette entité doit prendre place dans le diagnostic différentiel des plaies chroniques de la verge.

Correspondence

Chimpanzee urethral meningococci

To the Editor of the British Journal of Venereal Diseases

SIR—Reports on the isolation of Neisseria meningitidis from the cervix (Keys, Hecht, and Chow, 1971), and from the male urethra (Carpenter and Charles, 1942; Volk and Kraus, 1973; Holmes, 1972; Wende, 1972) raise questions as to the source of the meningococci and their isolation from the genital tract. We have recently recorded an observation relating to this subject in chimpanzees.

Our laboratory is currently studying experimental gonococcal urethritis in chimpanzees (Lucas, Chandler, Martin, and Schmale, 1971; Brown, Lucas, and Kuhn, 1972). Cultures were obtained from the nasopharynx, rectum, urethra, and/or cervix of these animals twice weekly. One male chimpanzee has been a chronic nasopharyngeal carrier of meningococci for 52 weeks. This animal frequently engages in self oral-genital contact, and on three occasions, meningococci were isolated from his urethra. Rectal cultures have been continuously negative for meningococci.

The meningococci isolated from the nasopharynx and the urethra both grew well on Thayer-Martin selective medium (Martin, Billings, Hackney, and Thayer, 1967). Both produced acid without gas in glucose and maltose, but were negative in mannitol, lactose, sucrose, and laevulose; both were negative for β -D-galactosidase activity on o-nitrophenyl- β -Dgalactopyranoside (ONPG), and neither could be grouped.

These findings are compatible with the hypothesis that the urethral and nasopharyngeal meningococci could be the same organism, and implies that nasopharyngeal meningococci were transmitted to the genital tract by fellatio.

Yours faithfully, W. JERRY BROWN, S. J. KRAUS, AND R. J. ARKO

VENEREAL DISEASE RESEARCH UNIT, CENTER FOR DISEASE CONTROL, U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE, Atlanta, Georgia 30333, U.S.A. July, 1972

References

Brown, W. J., Lucas, C. T., and Kuhn, U. S. G. (1972) Brit. J. Vener. Dis., 48, 177

CARPENTER, C. M., and CHARLES, R. (1942) Amer. J. publ. Hlth, 32, 640

HOLMES, K. K. (1972) Personal communication

LUCAS, C. T., CHANDLER, F., MARTIN, J. E., and SCHMALE, J. D. (1971) J. Amer. med. Ass., 216, 1612

Keys, T. F., Hecht, R. H., and Chow, A. W. (1971) New Engl. J. Med., 285, 505

MARTIN, J. E., BILLINGS, T. E., HACKNEY, J. F., and THAYER, J. D. (1967) Publ. Hlth Rep. (Wash.)., 82, 361 VOLK, J., and KRAUS, S. J. (1973) To be published Wende, R. D. (1972) Personal communication